**Theoretical Computer Science**
**Logic, semantics and theory of programming**

**Volume 198, Numbers 1–2, 30 May 1998**

Abstracted/Indexed in: ACM Computing Reviews, Compuscience, Computer Abstracts, Current Contents: Engineering, Technology & Applied Science, Engineering Index/Compendex, INSPEC Information Services, Mathematical Reviews, Zentralblatt für Mathematik

## Contents

**Fundamental Studies**

*F. Otto, P. Narendran and D.J. Dougherty*
Equational unification, word unification, and 2nd-order equational unification 1

*G. Nadathur and D.S. Wilson*
A notation for lambda terms. A generalization of environments 49

**Contributions**

*V. Geffert*
A communication hierarchy of parallel computations 99

*C. Hartonas*
A fixpoint approach to finite delay and fairness 131

*M. Boreale and D. Sangiorgi*
Some congruence properties for $\pi$-calculus bisimilarities 159

*R. Goldblatt*
Enlargements of functional algebras for the lambda calculus 177

**Notes**

*U. Egly*
An answer to an open problem of Urquhart 201

*J. Esparza*
Reachability in live and safe free-choice Petri nets is NP-complete 211

*F. Corradini*
On the coarsest congruence within global-clock-bounded equivalence 225

*N. Çağman and J.R. Hindley*
Combinatory weak reduction in lambda calculus 239

Author index volume 198 249